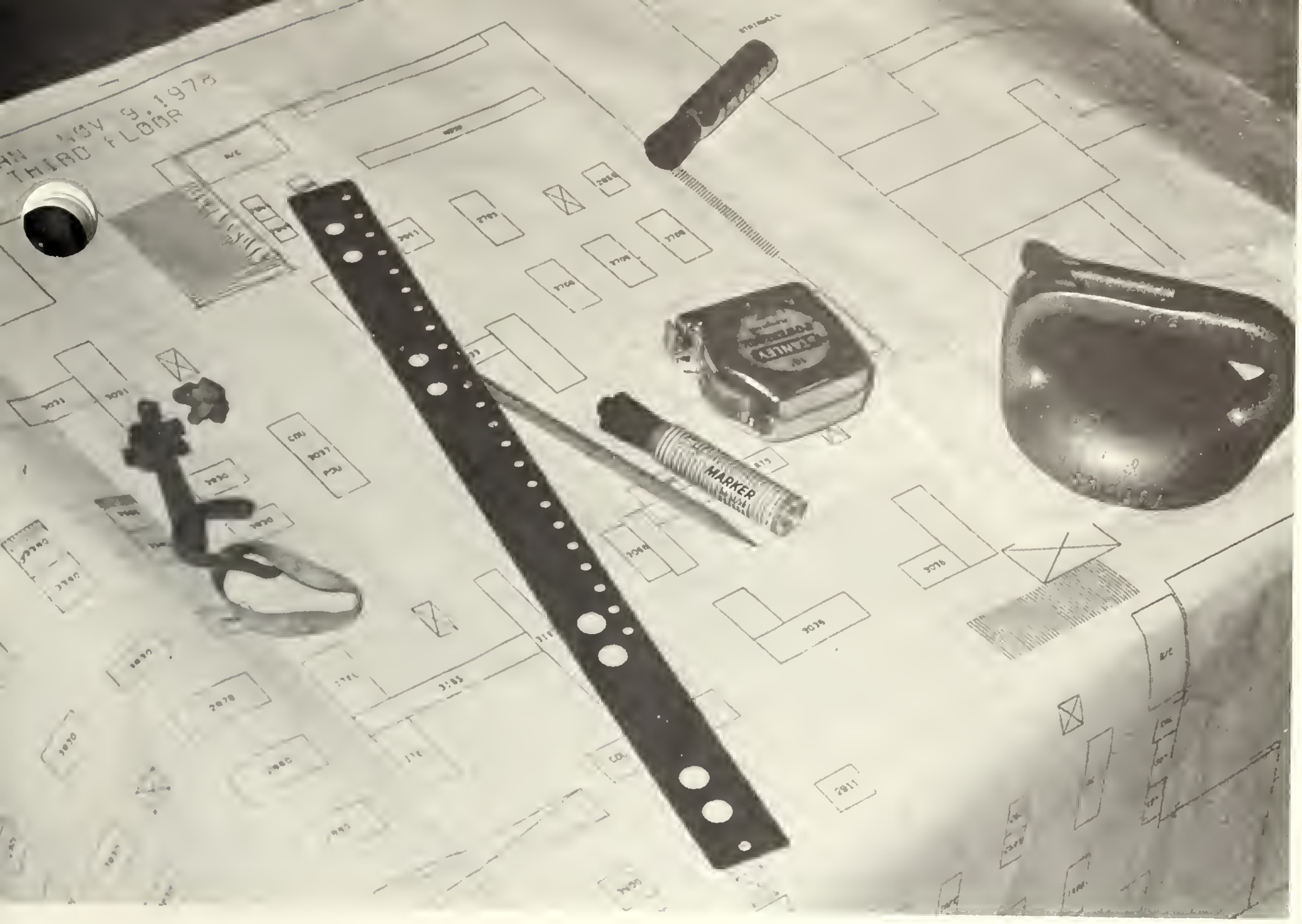

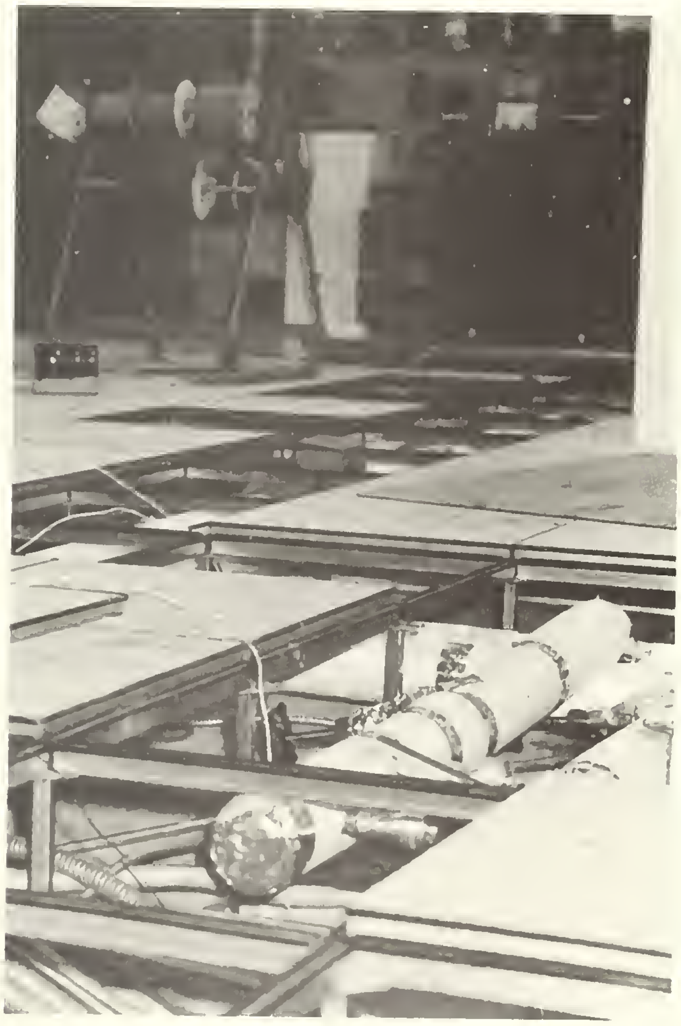

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Janet Barr, Editor

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During the past several months, COMPUTERNEWS has endeavoured to keep its readers informed of the status of UTCC's consolidation project. We are pleased to relate that the physical site preparation and installation of machinery are progressing within the expected timeframe.

The consolidation is by its very nature a high profile event but it is important that the University of Toronto computing community not lose sight of the overall computing picture on campus. The large mainframes occupy one end of the computing spectrum while the minis and micros play an equally important role at the other end. UTCC has recognized the value and potential of these small systems and this area has until now been addressed through the Computer Research Facility (CRF).

Recently, UTCC has planned an even greater emphasis on this aspect of computing by developing CRF into a more comprehensive service. The following is a detailed description of this recent reorganization within UTCC; a reorganization which addressed several of the major issues confronting UTCC's computing services. In simple terms, UTCC is expanding and reinforcing its commitments to the development, service, and support of mini and micro computer systems. UTCC recognizes the need to complement its mainframe services with expanded communications and mini computer systems and will make a concerted effort to employ the most efficient hardware and software systems for the delivery of effective services to its users. As technology advances, UTCC will be developing and incorporating these advances in the overall setup of its services.

Coupled with this major direction, UTCC is confronted with the need to devise an effective management structure for the non-IBM systems. With the long-awaited consolidation of IBM mainframes in McLennan Laboratories, UTCC is creating a concentrated non-IBM machine site in the Sandford Fleming building, partly by design, and partly due to insufficient space in the McLennan building. Specifically, the DEC 1090 will continue to operate from the Sandford Fleming building throughout most of the reconstruction. Hopefully, some additional space will be available on the third floor of McLennan Laboratories in time to move and consolidate all the mainframe systems. In the meantime, as an interim solution, UTCC believes that it is best to manage and operate this mainframe system together with the rest of the DEC equipment. Furthermore, UTCC believes that in the near future, a large group of DEC-oriented people will create the critical mass needed to effect significant leaps forward in UTCC's expertise.

cont'd...

With this reorganization, it is UTCC's intent to significantly increase the number of staff members involved with small systems. As such, UTCC is building and expanding on the expertise gained in the past by the Computer Research Facility (CRF), and is almost doubling the number of people involved in such activities. More important, UTCC has recognized the fact that extended commitment to maintenance and field support seriously impaired the ability of CRF to develop and expand the services offered to the university community. UTCC will now be supporting the development of both hardware and software in the different groups, thus allowing the personnel to undertake new projects and start addressing the issues of our future systems; at the same time, UTCC will continue to build a very effective field support organization to deal with the services associated with all UTCC-maintained systems, ranging from modems, terminals and LS1-11 based systems to the largest PDP-11 systems.

The new Group will be named Communications and Small Systems, and will be responsible for carrying forward not only the day-by-day field support services provided by UTCC, but the development of communication systems, IBM oriented or otherwise, as well as the implementation of the VIVA project and continued support for lab-oriented systems. As mentioned earlier, the responsibility for the DEC 10 systems will temporarily rest with this Group until the DEC 10 services mature, development projects become production systems, and, hopefully by that time, the DEC 1090 can be relocated with the rest of the mainframes. Mr. Kam Jain will supervise the operation of this substantial DEC 10 and PDP-11 facility, reporting to Mr. Derry Cox, Manager of Operations.

Mr. Eugene Siciunas has been appointed as the Manager of the new Group. UTCC anticipates significant results from Eugene's guidance of this newly created Group. Dennis Smith will lend his expertise in the Management Office, and help redirect some of UTCC's services to take advantage of the mini computer technology. In his new position as Technical Manager for the Computer Centre at large, Dennis will provide the technical guidance for the staff in the Communications and Small Systems Group, in addition to his other responsibilities in the Management Office.

UTCC is looking forward to close, unified team-work amongst all arms of our computing services organization towards one goal; that is, improved services and responsiveness to UTCC's users' needs.

Doron Cohen

IBM
System 370
I/O Interface
Unit Emergency
TOD Clock
Diagnostic On IMPL
Alarm Volume
Operator Console On IMPL
Power Select

CONSOLIDATION

Previous editions of COMPUTERNEWS have described UTCC's plans to consolidate and centralize our IBM hardware in a newly renovated site located on the third floor of the undergraduate wing of the McLennan Physical Laboratories. We are very pleased to announce that the first two major objectives of our consolidation plan have been met. As the reader will note from the pictures on the front cover and within this issue of COMPUTERNEWS, our site has been readied and the 3033 Processor has arrived and been installed by IBM. The site renovation planning effort began early last spring when the Committee on Accommodations and Facilities approved the renovation of space on the third floor of the undergraduate wing. Detailed planning of the required changes occupied the balance of May and June. By July, final contract specifications were released for tender and demolition of the existing offices began in August. Reconstruction has proceeded at a furious pace since this time in order to meet UTCC's installation completion date of November 20.

The renovation efforts were divided into three major areas, architectural, mechanical and electrical. The most visible of these three has been the architectural expansion on the third floor. The architectural work had to be carried out with care since the S/360-65 machine room had to be joined to the new site while the system remained running throughout this period with as few interruptions as possible. Indeed, while the machinery continued to run, two of the four brick walls surrounding the machine room were removed. Since these walls were within four feet of some operating disk systems, the demolition was carried out very gingerly and carefully. Upon completion of the exterior machine-room wall modifications, the existing raised-floor was expanded to approximately four times its original size. Many other less-visible changes have been made to complete this contract, including duct shaft modifications on the second floor as well as on the penthouse.

Behind the scenes, or more specifically, above the scene in the penthouse area over the new machine room, significant mechanical and electrical changes had to be made. Although the McLennan building was already air-conditioned, the existing system was not suitable for the type of environment necessary for a computer installation and consequently a new system had to be installed. In addition, new electrical supplies were required as the existing services could not meet the capacity requirements of UTCC's consolidated centre. These changes were basically completed by Friday, November 10 and on the following Monday, the 3033 Processor arrived.

While tradesmen continued their final installations in other areas of the machine room, IBM personnel began assembling the 3033 Processor. Progress on this project went very smoothly with only one or two very minor delays brought on in part by a motor

cont'd...

CONSOLIDATION cont'd

generator problem in the penthouse and an interconnecting cable which had to be replaced. IBM's commitment was to complete this installation by November 20. The installation team made it look easy, as they were packed up and out in time for lunch on Friday, November 17!

Concurrent with this installation, Control Data of Canada shipped in new disk subsystems to be installed on the new machine. These disk drives, which are the functionally compatible equivalent of IBM 3330-11 type devices, were installed by Monday, November 20.

Upon the completion of this installation, UTCC took the machine for software development and operator training. While MVS is fully developed and has been used previously in several user tests on the S/370-165-II, there was still a lot of work to be done in configuring the system to the new machine and preparing for the conversion of online datasets to the 3330-11 double density drives. In addition, several software tests and validation runs were carried out. Principal among these were:

- a validation stream to verify the functionality of all software components offered by UTCC
- a stress test to verify the functionality of all units accessed from all channels under heavy load
- a pricing benchmark to finalize the precise factors in the accounting algorithms for the 3033 Processor

About the time this issue of COMPUTERNEWS goes to press, UTCC systems personnel will be putting the final touches to the system software validation project. Simultaneously, final preparations for the move of services from the S/370-165-II to the 3033 will be nearing completion. On Friday, December 8, at 1800 hours, the 165 will be powered down for the task of moving the peripheral units to the new site for attaching to the 3033. The task of moving all peripheral units, the tape/disk library, and the teleprocessing lines is a major task which will take the entire weekend to complete. As a result of this equipment move, there will be no GPJS,HSJS, TSO or WYLBUR services available until Monday, December 11, at 0100 hours. Users will come back Monday morning to find our services provided from the 3033 running in our new site. Access from all our existing sites will be operationally transparent. The only physical relocation that users should be aware of is the move of the Tape/Disk Librarian's office to the McLennan building. This move and related topics involving the library are discussed in more detail in the article entitled TAPE LIBRARY MOVE elsewhere in this issue.

The preceding paragraphs have described the status of the consolidation project up until December 11. Many major changes remain to be carried out beyond this date. Commencing Monday, December 11, the S/370-165-II will be disassembled, packed, transported and reassembled at the new site in McLennan Labs. After a period of systems work to install and test software, the services of the S/360-65 will be moved to the

cont'd...

CONSOLIDATION cont'd

S/370-165-II in early January, 1979. Following this switchover, the S/360-65 will be removed from service and dismantled. The article entitled S/370-165-II TO REPLACE S/360-65 in this issue of COMPUTERNEWS describes some of the improvements that users should expect to result from this changeover.

Further on in our consolidation project, several other tasks remain to be completed. The two principal efforts involve the relocation of the Communications and Small Systems Group (formerly CRF. Refer to the lead article in this month's issue of COMPUTERNEWS for details concerning the new Group.) from the second floor of the Sandford Fleming Building to the space vacated on the first floor. At this point, the DEC 1090 and the PDP-11 mini computer systems hardware complement will be merged in the south side of the Burton wing after some minor temporary renovations to the area. During February - March 1978, the administrative services will be moved from the present location to the new site. Future issues of COMPUTERNEWS will deal with these projects in further detail.

A description of the ways in which a centralized facility will greatly enhance UTCC's overall service was provided in the September issue of COMPUTERNEWS (refer to the lead article). In addition to the advantages which stem from the consolidation of UTCC's machinery, a centralized physical site also provides several benefits to users. First, the McLennan Physical Laboratories is a modern building and as such offers a more reliable utility service than available at the Sandford Fleming building. Additionally, both UTCC and its users will find the improved vehicular/pedestrian facilities to their advantage. Finally, the modern and durable construction materials, the code conformity, and support sub-system redundancy will provide the University of Toronto computing community with a highly reliable physical site.

In summary, we are quite pleased with our new facilities and the 3033 Processor and we look forward to delivering service to our users from this site. If you are in the area of the McLennan Laboratories, we invite you to come up and see the new site and machine from the viewing windows located in the corridor at the top of the stairs on the third floor.

Derry Cox
Eugene Siciunas

ACCOUNTING ALGORITHM CHANGES WITH 3033/MVS

With the installation of the IBM 3033 Processor and the MVS Operating System, the algorithm used to account for the execution phase of job processing and TSO sessions will be changed. This change will affect the calculation of memory usage and introduce a direct charge for disk and tape input/output operations.

cont'd...

ACCOUNTING ALGORITHM CHANGES cont'd

This change in algorithm (not to be confused with a change in rates, which will be discussed later in this article) is being implemented for two reasons:

1. The new Operating System, MVS, offers facilities such as virtual storage and virtual input/output (VIO), facilities which were not available under MVT, and hence are not considered in the old algorithm.

2. The MVT accounting algorithm has been essentially unchanged since 1972 -- the environment has changed substanially since then and will change even more once the IBM 3033 Processor has been installed. A new accounting algorithm is required to reflect this new environment. Compared to the machinery in use in 1972, the 3033 offers 3 times the main memory, 4 times the channels, and 7 times the online disk storage. For these reasons, the present charging algorithm does not accurately account for the resources used and as such results in inequitable charges.

The major change in the accounting algorithm is the removal of the quadratic factor in the memory usage calculation. Users will now be charged the same per byte of memory used regardless of the total amount used. In contrast, under the old algorithm, a user who required 250K of storage was charged 36% more per byte than a user who only required 50K. Similarly, a 600K requirement resulted in twice the charge per byte compared to 50K. This change, from a quadratic to a linear algorithm, recognizes both the virtual storage facility and the greatly reduced cost of main memory. In addition, users will be charged only for the amount of storage used rather than that allocated, with the result that, in general, there will no longer be a penalty for over-estimating storage requirements other than a possible CLASS change. (Users are cautioned that some language processors and other packages will use all the memory allocated -- be sure that this is not the case before seriously over-allocating storage.)

The other significant change is the introduction of a direct charge for disk and tape I/O. Under MVT, disk and tape I/O is charged indirectly by being factored into memory occupancy by means of the "I/O WAIT" time. However this has a serious shortcoming -- overlapped I/O (I/O done in parallel with computing) is free. While this was reasonable when the CPU was the major resource and there was little I/O activity, it is no longer so today. The shift from cards to online and tape storage, coupled with a trend away from "straight computing" towards data processing, has resulted in I/O activity being a major component of computer usage. It is only reasonable, therefore, that disk and tape I/O now be charged directly on the basis of the number of I/O requests (called EXCP's, for EXecute Channel Program). Similarly, VIO users will be charged on the basis of the pages (4K bytes) transferred from memory to disk and back. This change from "I/O WAIT" to EXCP

cont'd...

ACCOUNTING ALGORITHM CHANGES cont'd

charging may result in a very small number of users experiencing increased charges. Users who suspect this to be the case should contact Herb Kugel (978-7286) or a Computing Co-ordinator for assistance in minimizing their I/O charges.

In addition to the changes in algorithm just discussed, there will also be changes in the rates for execution services (CPU and memory). While the actual rates have not as yet been finalized, the objective of the new rates is an average total reduction of 22% in execution charges, including CPU, memory, and disk and tape I/O. Rates for all other services will remain unchanged. Users should watch HOTNEWS for the announcement of the new rates which will be published as soon as the rates are finalized.

Sean Keeley

S/370-165-II TO REPLACE S/360-65

As indicated in the September, 1978 issue of COMPUTERNEWS, the S/370-165-II will be replacing the S/360-65 in early January, 1979 in the McLennan Laboratories. In the past, we have been hampered in delivering a service as reliable as we would desire. This was due in part to the age of the S/360-65 and to performance inadequacies stemming from problems with the S/360 channel diagnostics, limited high speed memory, and slower disk system response as a result of heavy file I/O on the 2314 disk drives. These problems are not surprising in light of the fact that the S/360-65 has been in operation since 1969 and newer storage and tape devices are not being supported on the S/360.

Performance on the S/370-165-II will be enhanced by the reduction of unscheduled interruptions through the use of instruction retry, processor storage error checking and correction, powerful microdiagnostics for the CPU and channel and logout analysis for intermittent failures. The S/370-165-II CPU machine - cycle time is almost 2.5 times faster than the 65. The main processor on the 165 with four megabytes of memory will finally permit larger workspace size (176K), 3330-11 type disk access for APL workspace, and file subsystem including 2301 drum support for workspace swapping. Back-up time for APL and ATS will be substantially reduced as a result of faster 6250 BPI tape drives which will permit UTCC to extend hours of service on the new system.

ATS will continue to use 2314 disk drives but the use of high speed memory instead of the current Large Capacity Storage (LCS) on the 65 should further improve terminal response time. While we expect the mean time between failures (MTBF) on the S/370-165-II to be better than the S/360-65, the mean time to recover (MTTR) should be significantly better than it was on the S/360 because of the superior technology of the S/370 architecture. The following table gives examples of the enhancements and performance improvements available to the user community as a result of this hardware changeover.

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S/370-165-II TO REPLACE S/360-65 cont'd

HARDWARE	S/360-65	S/370-165-II
CPU(cycle time)	200 nanoseconds	80 nanoseconds
Memory	1.5 Megabytes	4.0 Megabytes
Channels	1 Byte + 2 Selector	1 Byte + 2 Selector + 2 Block Multiplexor
Disk Storage (Approximate)	810 Megabytes	1440 Megabytes
Tapes	800 BPI	6250 BPI
3705	--	N/C

In summary, reliability, performance enhancements, extended availability and improved serviceability on the S/370-165-II should further improve APL and ATS services.

Kam Jain

ERRATUM

Newsletter subscribers should note the following correction to the article entitled NUMERICAL METHODS CONSULTING SERVICE which appeared in last month's issue of COMPUTERNEWS.

First, there takes place a factorization of the matrix, which is an $O(M^3)$ operation, M being the order of the matrix, but simultaneously an estimate of the condition of the matrix is also output and this estimate requires only $O(M^2)$ operations.

We apologize for any confusion this error may have caused.

Janet Barr

TAPE LIBRARY MOVE

Coincident with the move of services from the S/370-165-II to the IBM 3033 Processor which is expected to take place during the weekend of December 9/10, UTCC will be moving all Native and Foreign tapes and disks used on the S/370-165-II from the Sandford Fleming Building to the McLennan Laboratories.

On Monday, December 11, our Tape/Disk Librarian, Ms. Janet Latimer, will be set up in her new office - Room 368A, located next to the new machine room ready to serve our tape/disk customers as usual.

Users shouldn't notice too many changes in service, but there will, of necessity, be a few changes as a result of the relocation. Transactions involving direct contact with the Librarian will of course mean that users will have to go to the McLennan Building instead of the Sandford Fleming Building. Users will no longer be able to enter the machine room area in our new location with the result that there may be a brief wait in future when foreign media are retrieved. Users who wish to move media between the DEC 1090 and the 3033 will have to contact the Librarian a few hours before the media are required on the receiving machine in order to allow UTCC time to transport the material between buildings. Offsetting this inconvenience will be the shortening of time required to transfer tape/disk library material between the 3033 and the S/360-65 (Note that S/360 services will be transferred to the S/370-165-II once the S/370 has been re-installed in the McLennan building). As the libraries will be located beside each other, minimal time will be required to move the material once the user has authorized the transfer. As soon as the "moving dust" settles, these libraries will be completely integrated, thus eliminating all need for this procedure in the near future.

Other services such as paper-tape submission and retrieval, tape cleaning services, tape purchases, etc., will remain the same but will take place at the new library office location. Similarly, all telephone numbers will remain the same.

In conclusion, we must note that moving the entire library means that all media must be packed, transported, unpacked and refiled at their new location. UTCC will take meticulous care in the handling of this move in order to prevent loss or damage during this changeover. However, as all people are aware, nothing of this nature can ever be absolutely guaranteed 100%. In the event of loss or damage to a tape or disk, UTCC will accept liability and responsibility for replacement of the medium and associated machine charges for recreation of the contents from another machine-readable file. We urge our users to consider backing up critical tapes and off-line disks containing critical files, which is a wise policy at all times. Foreign tape/disk customers are free to remove their media to their own locations prior to December 8 and return them on or after December 11 if they feel more comfortable with this approach. We emphasize that extreme care will be given to this move. However, users are cautioned that the ultimate responsibility for maintenance and back-up of data must rest with the owner of the data.

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TAPE LIBRARY MOVE cont'd

If you have any questions or concerns about the library move, UTCC invites you to direct these comments to Janet Latimer (978-7319), Paul Scarborough (978-6220) or Derry Cox (978-7092).

Derry Cox

MVS PUBLICATIONS

The following outlines some general guidelines which users should keep in mind when referencing or purchasing MVS documentation.

1. Program Product Processors

The program product processors use the same manuals as under OS/MVT.

2. Linkage Editor and Utilities

The Linkage Editor and Utility manuals have been modified so that error messages have been removed from them and a separate manual is needed for each. The new manuals are:

OS/VS Linkage Editor and Loader
OS/VS Linkage Editor and Loader Messages
OS/VS Utilities
OS/VS Utilities Messages

3. System Error Messages and ABEND Codes

The user should refer to the following new manuals:

OS/VS2 System Messages
OS/VS2 System Codes

4. MVS Assembler

The Assembler manuals have been improved and rewritten for VS. The manuals are:

OS/VS-VM/370 Assembler Programmers Guide
OS/VS-DOS/VS-VM/370 Assembler Language

5. Job Control Language

The user may be able to continue to use the OS JCL manual. However, the new MVS JCL manual has been rewritten, is easier to use and documents the new MVS features. The new MVS JCL manual is:

OS/VS2 JCL

6. WYLBUR

The user should refer to the following new manual:

UTCC/OBS WYLBUR Reference Manual

7. USERBOOK MVS Documentation

The following new USERBOOK chapter is available:

USERBOOK 3.9 MVT TO MVS Conversion Summary

This USERBOOK chapter outlines some of the differences between OS/MVT and MVS. Only changes which immediately affect jobs are listed. Discussion of MVS concepts and functional enhancements available in MVS are not included in this chapter.

Any user whose USERBOOK subscription currently includes SECTION 3 will automatically receive a copy of this new chapter. Non-subscribers may obtain a copy of this document from the UTCC Information Office.

Marg Doherty

WYLBUR UNDER MVS

Most WYLBUR users have probably noticed that the change from OS/MVT to OS/MVS has brought with it a new WYLBUR processor. In many areas (such as most editing procedures, and the use of the WYLBUR Pre-Processor) the changeover is virtually transparent. However, those MVT/WYLBUR users who have attempted to run Batch jobs using WYLBUR under MVS are certain to have noticed many differences.

When UTCC was running MVT, the version of WYLBUR that we were running came from the SLAC Computing Services of the Stanford Center for Information Processing, Stanford University. This version of WYLBUR contains much code which will only operate under MVT. Thus, it was inevitable that the old version would have to be replaced when UTCC upgraded its Batch Operating System to MVS. However, UTCC wanted to give its users a WYLBUR processor as similar to the old MVT version as possible. Thus, it was decided to acquire a version which had been derived from the Stanford WYLBUR system--a system marketed by On-Line Business Systems, Inc. (OBS).

Although OBS/WYLBUR was derived from Stanford's WYLBUR, there are still changes in some WYLBUR commands. These changes occur principally for two reasons:

1. UTCC's OBS/WYLBUR contains features which were not available under the UTCC version of Stanford's WYLBUR.
2. The Job Submission Services provided by MVS for WYLBUR are substantially different from those provided by MVT.

In addition, not only are there some changes in WYLBUR commands, but there are also changes in WYLBUR procedures -- in the sequence of commands one uses in order to accomplish some things. This is particularly evident in the Job Submission and Retrieval process, and is due to the change in effect of some commands in the new system.

UTCC is aware of the fact that our users need current information in order to use new systems effectively. For this reason we have prepared a special section for USERBOOK -- Chapter 3.9 -- which describes the differences between MVT and MVS. In particular, the section on WYLBUR gives a summary of the various commands which are changed in syntax or meaning in OBS/WYLBUR, and gives some samples showing how to run jobs using the new WYLBUR system. In addition, UTCC intends to revise the existing USERBOOK section 3.3WYLBUR to reflect the new system, and to issue an entirely new Reference Manual and User's Guide. UTCC hopes that users, armed with this new information, will be able to convert to the new OBS/WYLBUR system with as few difficulties as possible.

John Bradley

DEC 10 CPU RUNTIME ANOMALY REVISITED

The "CPU runtime anomaly", reported in the September issue of COMPUTERNEWS, is now understood to result from incorrect conversion factors in the TOPS-10 monitor.

The KL10 processor actually counts the number of execution cycles accumulated by each user. This is done to avoid charging the user for time used during system overhead functions, and to make accounting information as accurate and reproducable as possible. The time actually reported to users is converted from processor cycles to CPU runtime and memory utilization using a pair of conversion factors kept in the monitor.

The factors supplied with the original TOPS-10 software were intended for use with the KL10A processor with its 50 MHz internal clock. The UTCC processor is a model B and has an execution cycle which is 20% faster.

Fixing the software to properly report the CPU runtime and memory usage is trivial. However, a simultaneous increase in the rate schedule will be necessary in order to leave the dollar charges for user jobs unchanged. As a result, the following changes will be made to the rate schedule.

Item	Unit	Old	New
CPU	/min	$3.90	$4.68
Memory	/KWmin	$0.125	$0.15

It is important that users understand that a particular process will cost exactly the same number of dollars after the changeover as before. For example, consider a program which uses 40 pages (20K words) and presently reports that it takes 7.2 seconds (0.12 minutes) to execute. The CPU charge is $.468 (=$3.90 x 0.12) and the memory charge is $.30 (=$0.125 x 20 x 0.12).

Once the software has been fixed to report the correct CPU runtime and the rates have been adjusted accordingly, the CPU runtime reported will be only 6.0 seconds. But the charges will remain the same, namely $.468 (=$4.68 x 0.10) for the CPU and $.30 (=$0.15 x 20 x 0.10) for the memory.

The end result is that there is no change in the cost of any user task, but the CPU runtime will, at last, be reported correctly. The date for this change has not yet been established, but users can expect the change to be implemented by early January.

Ed West

THE 10TH ONTARIO UNIVERSITIES COMPUTING CONFERENCE

From June 6 to June 8, 1979, the University of Ottawa will be hosting the Ontario Universities Computing Conference. The theme which has been decided on for next

cont'd...

THE 10TH COMPUTING CONFERENCE cont'd

year's Conference is "changing patterns in computing at universities and colleges". Currently, the Program Committee is calling for papers pertaining to this theme. Although prospective participants are not limited as to the choice of topic, the Program Committee has identified several areas of possible interest. The suggested topics include the effects of changing patterns in computing on education, research, administrative data processing systems, and on the role of the central computing service.

Papers are solicited from all members of the university and college community. Papers will be selected from abstracts (two to three pages single spaced), which must be submitted by January 22, 1979 to:

Program Committee
10th OUCC
Computing Centre
559 King Edward Avenue
University of Ottawa
Ottawa, Ontario
K1N 6N5

Notification of acceptance or otherwise will be given by March 1, 1979.

SPEAKEASY SESSIONS

Speakeasy is alive and well under the MVS Operating System. The "MU+" version has been installed and is now available; in fact, it is the only version available at present.

"MU+" is primarily a maintenance release of SPEAKEASY, but there are some additions. New features include a TSO prompter that automatically chooses the 090 or 150 version based upon your LOGON "SIZE" value, new differential equation solvers, linear programming linkules, as well as a large library of examples of existing features.

The new prompter has been installed on MVT as well. The TSO command "HELP SPEAKEZ" will provide details on the prompter.

Users with suggestions or inquiries about SPEAKEASY are invited to contact Ian Darwin, at 978-7318 or at UTCC by Campus Mail.

Ian Darwin

SCSS on the DEC

The DECsystem-10 version of SCSS, the SPSS Conversational Statistical System, has been installed and tested. Users should notice a significant improvement in response time as well as a reduction in cost. The release 3.1 test on the DEC produced 13 pages of output when printed and used 20 seconds of CPU time (at $3.90/min) and 13 minutes of connect time (at $2.00/hr.). The test of release 2.2 on TSO produced only 9 pages of output using 10 seconds of CPU time (at $11.40/min) and 23 minutes of connect time (at $3.75/hr.).

cont'd...

SCSS on the DEC cont'd

The main enhancement for release 3.1 is the FACTOR procedure. Documentation is available from the Information Office, Room 206, Engineering Annex, and also in a file called DOC:SCSS.MAN. Type HELP SCSS for more information. The script used to test the system is available in DEMO.TXT[154,1320] and the expected output is in DEMO.LOG[154,1320]. The SCSS masterfile required to run the test is in ELEC56.DAT[154,1320].

SCSS masterfiles can be created directly on the DEC or created on the Batch SPSS system on the S/370-165-II (or IBM 3033 Processor). To create an SCSS masterfile on the IBM machine, simply replace SAVE FILE with SAVE SCSS in your Batch job. The steps required to move and convert the file to DEC format are outlined in Appendix D of the SCSS Manual. Basically, the file must be transferred to the DEC on tape, loaded to disk, and run through the SCSCVT program to convert it. If enough use warrants it, a more automatic file transfer utility will be provided. Users with questions about SCSS and/or file transfer are invited to call John Roth at 978-6878.

With the installation of SCSS on the DECsystem-10, UTCC now plans to drop support for the TSO version. Specifically, it will not be available under TSO when MVS is installed on the IBM 3033 Processor. Anyone currently using SCSS under TSO should contact John Roth as soon as possible.

John Roth

PERSONNEL CHANGES

We would like to extend a warm welcome to the various new members of UTCC's staff and briefly introduce them to our readers. Robert Heard, formerly a part-time advisor, has accepted the position of Operator/Program Advisor at Scarborough College. Bernice Ogino is replacing Ruth Borenstein as a Customer Services Representative. Bernice will be providing educational and advisory support in the area of text processing. Alex Nishri, a former part-time advisor at EAT, has joined the Assurance Group and will be replacing Michael Wagner, who is currently involved in systems performance evaluation. Alastair McKeating is a new member of the Programming Services Group. Frank Spitzer, formerly a text processing specialist from McGill University, has accepted a part-time term appointment as a text processing specialist. Besides working for the Computer Centre, Frank will be working for the Electrical Engineering Department. While at the Computer Centre, Frank will be providing advice and assistance in the formation of a typesetting service. Raeann Chipman is the new Management Secretary and Ruth Gbalojobi is the new Executive Secretary. Thano (Athanasius) Kaponeridis has accepted a term appointment with the new Communications and Small Systems Group. Thano will be involved with human factors design.

It is a pleasure to have you all with us.

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PERSONNEL CHANGES cont'd

Several staff members will be leaving the Centre to pursue their careers elsewhere. Gurpal Singh has transferred to the Institute for Aerospace Studies. Ran Talbott, a programmer in Data Processing, has returned to California. JoAnne Wright, formerly a secretary with the Services Group, has accepted a promotion within the University and is now working with the Department of Chemistry, and June Bridges, formerly a secretary with CRF, has accepted a promotion within the University and is now working with the Department of Epidemiology. Ron Moses, Accountant, Management Office, will be leaving in December, 1978.

We would like to wish all of you the best of luck.

Clara Pereira

RECENT ACQUISITIONS IN THE DEPARTMENT OF COMPUTER SCIENCE LIBRARY

American Society for Information Science
  Proceedings of the annual meeting. v. 14 (1977).

American Society for Information Science.
  The value of information.
A.S.I.S., 1977.

Association for Computing Machinery.
  Administrative directory 1978 of college and university computer science departments and computer centers.
New York, ACM, 1978.

Canadian computer census, 1977.
  Toronto, CIPS, 1978?

Canadian Mathematical Society.
  Membership list 1978-1980.
Montreal, 1978.

CODASYL. Data Description Language Committee.
  Journal of development 1978.
Hull, P.Q., Canadian Government EDP Standards Committee, 1978.

Conference on Cataloguing and Information Services for Machine-Readable Data Files, Warrenton, Va., Mar. 1978.
  Cataloguing and information services for machine-readable data files.
Arlington, Va., DUALabs, 1978.

Harrison, Michael A.
  Introduction to formal language theory.
Reading, Mass., Addison-Wesley, 1978.

Horowitz, Ellis, and Sahni.
  Fundamentals of computer algorithms.
Potomac, Md., Computer Science Press, 1978.

IFIP Working Conference on Formal Description of Programming Concepts, St. Andrews, N.B., 1977.
  Formal description of programming concepts, ed. by E.J. Neuhold.
Amsterdam, North-Holland, 1978.

cont'd...

RECENT ACQUISITIONS cont'd

Kernighan, Brian W. and Plauger, P.M.
The elements of programming style.
New York, McGraw-Hill, 1978.

Matick, Richard E.
Computer storage systems and technology.
New York, Wiley, 1977.

Symposium on Foundations of Computer Science, 19th, Ann Arbor, Oct. 1978.
Foundations of computer science.
Long Beach, Cal., IEEE, 1978.

UNIVERSITY OF TORONTO COMPUTER CENTRE

CHRISTMAS & NEW YEAR HOLIDAY SCHEDULE

	22	23	24	25	26	27	28	29	30	31	1	2
	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue
TECHNICAL REF. LIBRARY	N	X	X	X	X	X	X	X	X	X	X	N
INFORMATION OFFICE	N	X	X	X	X	X	X	X	X	X	X	N
ACCOUNTING OFFICE	N	X	X	X	X	X	X	X	X	X	X	N
ADMINISTRATION OFFICE	N	X	X	X	X	X	X	X	X	X	X	N
TIME-SHARING ADVISING	N	X	X	X	X	X	X	X	X	X	X	N
ANNEX ADVISING OFFICE	N	X	X	X	X	X	X	X	X	X	X	N
S/360 OFFICES	N	X	X	X	X	X	X	X	X	X	X	N
S/360 FACILITIES	N	SS*	SS*	UO	UO	SS*	SS*	SS*	SS*	SS*	UO	N
3033 OFFICES	N	X	X	X	X	X	X	X	X	X	X	N
3033 FACILITIES	N	SS	SS	X	X	SS	SS	SS	SS	SS	X	N
DEC 1090 OFFICES	N	X	X	X	X	X	X	X	X	X	X	N
DEC 1090 FACILITIES	N	UO	UO	UO	UO	SS*	SS*	SS*	UO	UO	UO	N
CRF OFFICES	N	X	X	X	X	X	X	X	X	X	X	N
CRF FACILITIES	N	X[K]	X[K]	X[K]	X[K]	X[K]	X[K]	X[K]	X[K]	X[K]	X[K]	N

KEY

3033 - GPJS,HSJS,TSO,WYLBUR
S/360 - APL,ATS
CRF - Computer Research Facility
DEC 1090 - Time-sharing

X	Closed
UO	Unattended Operation
SS	Single Shift 9am - 5pm
N	Normal Hours of Service

[K] CRF facilities will be open to Keyholders as usual

* S/360 and DEC 1090 will be running unattended after 5pm. Service may be interrupted for brief periods to perform system backups etc.

Access to EUT, EAT, Keypunch and terminal facilities in the Engineering Annex will be available at hours when the 3033 is scheduled for operation. Users of other terminal sites should watch for signs or check with their Computing Co-ordinator.

UTCC DIRECTORY

POSITION	ROOM	CENTREX PHONE NUMBER
DIRECTOR		
Dr. Doron Cohen	NP350	8948
ASSISTANT TO THE DIRECTOR		
Suzan Fawcett	NP350	4428
ASSOCIATE DIRECTOR		
Rein Mikkor	NP350	5058
ASSOCIATE DIRECTOR		
Al Heyworth	NP350	4936
INFORMATION OFFICE		
General Inquiries	EA206	4990
Marg Doherty	EA206	8995
MANAGER, SERVICES		
Stan Yagi	NP350	7331
INFORMATION & CUSTOMER SERVICES		
Don Gibson	EA201	5568
SUPERVISOR, PROGRAMMING SERVICES		
Helen Peacock	SG201	6877
SUPERVISOR, APPLICATIONS		
Herb Kugel	SG304	7286
SUPERVISOR, CO-ORDINATORS		
Ralph Lombardi	SG305	7130
COMPUTING CO-ORDINATORS		
Engineering Annex Terminal		
Jill Reece	EA103A	4357
Program Advisors	EA103	8599
Time-Sharing Support		
TS Advisors	SG204	6465
Mark Tapia	SG204	7109
Erindale		
Clem DiPlacido		828-5311

UTCC SYSTEMS

3033 PROCESSOR

- located in McLennan Physical Laboratories
- provides General Purpose Job Stream, High Speed Job Stream, TSO, WYLBUR
- 6 megabytes of memory
- MVS with JES2

SYSTEM/360 MODEL 65

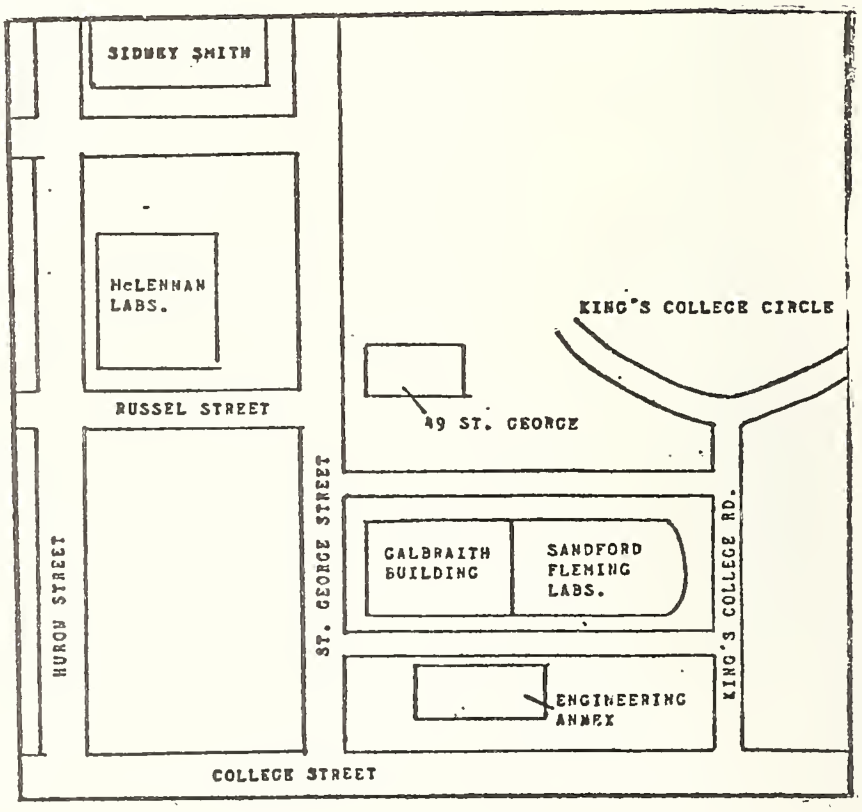
- located in McLennan Physical Laboratories
- provides APL and ATS services
- 1536K bytes of core
- OS/MVT with APL and ATS

COMMUNICATIONS & SMALL SYSTEMS

- located in SF207/SF109/112
- DEC GT44 System with PDP-11/40 CPU
- DEC GT40 System with PDP-11/05 CPU
- provides specialized graphics and interactive graphics
- provides on-line and real-time computing services, data acquisition and minicomputer services
- DECsystem 1090
- provides General Purpose Time-Sharing
- 256k - 36 bit words of memory
- TOPS10 operating system

SYSTEM/370 MODEL 165-II

- currently unavailable



Scarborough		
Ihor Prociuk		284-3173
Arts and Science		
Sue Chong	SS2133	6509
New Physics		
Bob Chambers	NP1203B	8823

MANAGER, COMMUNICATIONS AND SMALL SYSTEMS

Eugene Siciunas	NP350	4967

MANAGER, OPERATIONS

Derry Cox	NP350	7092

SUPERVISORS, OPERATIONS

Paul Scarborough(DEC S/370-165)	SF103	6220
Kam Jain (S/360-65)	NP333	7374
Dave Wong (S/370-158)		6864

MANAGER, SYSTEMS

Sean Keeley	NP350	3579

TECHNICAL MANAGER

Dennis Smith	NP350	4800

ACCOUNTS

Merton Hunte	EA206	8702
Sylvia May	EA206	7148

ACCESS CODES

Janet Howarth	EA206	8703

KEY:

EA = Engineering Annex
SG = 49 St. George
NP = McLennan Physical (New Physics)
SF = Sandford Fleming
SS = Sydney Smith

JOB AND SYSTEM STATUS QUERIES

SYSTEM/370,TSO	7373
ATS/APL	6234
2741 TERMINAL MALFUNCTIONS	7107

TIME-SHARING SERVICES	DIAL-UP
APL,ATS	7200 CENTREX 7201 NON CENTREX
TSO,WYLBUR	6200 CENTREX 6201 NON CENTREX
DEC	4224 CENTREX 4244 NON CENTREX
PHONE-IN ADVISING	6465